POR SF
11.3.125.14
NO DATE

COPPER (Cu) *

OSHA PEL: 1mg/M^3 (mist and dust)
0.1mg/M^3 (fume)

ACGIH TLV: 1mg/M^3 (mist and dust)
0.2mg/M^3 (fume)

PHYSICAL DATA

Appearance: Distinct reddish metal

Melting Point: 1083°C

PHYSIOLOGICAL EFFECTS

Industrial exposure to copper fumes, dusts or mists results in metal fume fever with atrophic changes in nasal mucous membranes. Chronic poisoning results in Wilson's disease, characterized by a hepatic cirrhosis, brain damage, demyelination, renal disease and copper deposition in the cornea.

REACTIVITY DATA

Copper reacts violently with acetylene, ammonium nitrate, bromates, chlorates, iodates, chlorine, ClF_3, ethylene oxide, fluorine, hydrogen peroxide, hydrazic acid, hydrogen sulfide, $Pb(N_3)_2$, K_2O_2, NaN_3, and Na_2O_2.

Copper is incompatible with 1-bromo-2-propyne.

Copper fume is incompatible with acetylene gas.

Copper dust and mist are incompatible with acetylene gas and magnesium metal.